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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/816,327

04/01/2004

Min Sheng Kao

91821

9128

7590

05/26/2005

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EXAMINER

NASRI, JAVAID H

ART UNIT

PAPER NUMBER

2839

DATE MAILED: 05/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/816,327	<b>Applicant(s)</b> KAO ET AL.	
	<b>Examiner</b> Javaid Nasri	<b>Art Unit</b> 2839	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/1/04</u> | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The PTO-1449 form submitted with the IDS received with the application is objected. The applicant's name mentioned on the PTO-1449 form is Kevin L. Parsons instead of Kao et al. A correction has been made accordingly on the PTO-1449 form by the examiner.

### ***Drawings***

2. Figures 7, 9 and 11 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

3. Claims 6-8 are objected to because of the following informalities:
  - a) Claims 6 and 7 are duplicates of claims 2 and 3. Check the dependencies of claims 6 and 7.
  - b) Claim 8 is a duplicate of claim 4. Check the dependency of claim 8.

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Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 4, 5 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Sawada et al (5,742,480, cited in IDS).

Sawada et al discloses, **for claim 1**, at least one photoelectric element (2, 3) having a plurality of signal pins (2a) and at least one non-signal pin (2e); a plurality of flexible printed circuit boards (46), one or two of the flexible printed circuit boards **optionally** having a ground plane, and the rest **optionally** having at least one signal transmission plane for connecting to said signal pins, wherein said at least one non-signal pin connects to said ground plane to prevent from electromagnetic interference; and a printed circuit board (8), connecting to said flexible printed circuit board to form an electrical connection with said photoelectric element via said flexible printed circuit boards (see note below), **for claims 4 and 8**, a passive element mounted on said signal transmission plane for impedance matching; one end of said passive element connects to pins of said photoelectric element; another end of said passive element connects to said printed circuit board via a signal transmission line, **for claim 5**, at least one photoelectric transmitter (2, 3) having a plurality of signal pins (2a) and at least one non-signal pin (2e); at least one photoelectric receiver having a plurality of signal pins and at least one non-signal pin; a plurality

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of flexible printed circuit boards (46), one or two of the flexible printed circuit boards optionally having a ground plane, and the rest optionally having at least one signal transmission plane for connecting to said signal pins, wherein said at least one non-signal pin connects to said ground plane to prevent from electromagnetic interference; and a printed circuit board (8), connecting to said flexible printed circuit boards to form an electrical connection with said photoelectric transmitter/receiver via said flexible printed circuit boards (see note below).

Note: The flexible PCB has optionally a ground plane, in other words the reference does not have to a ground plane. It is not a positive limitation. Since the reference does not have to have a ground plane therefore, the non-signal pin does not have to connect to ground plane.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2, 3, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawada et al.

Sawada et al discloses all the limitations of claim 1, as shown above,

However, Sawada et al. does not disclose:

- a) the photoelectric element is a Transistor Outline CAN element. Official notice is taken that the photoelectric element to be a Transistor Outline CAN element is well known in the art, therefore, it would have been

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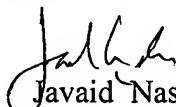
obvious to one of ordinary skill in the art, at the time of the invention for Sawada et al to have the photoelectric element to be a Transistor Outline CAN element for better application.

### **Contact**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javaid Nasri whose telephone number is 571 272 2095. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tulsidas C. Patel can be reached on 571 272 2800 ext 39. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Javaid Nasri  
Primary Examiner  
Art Unit 2839

JN

Jhn  
May 20, 2005